CLAIMS:

1. Isolated and purified pili obtained from *Mycobacterium tuberculosis*.

2. The pili of Claim 1, which have a diameter of about 2 to about 7 nm.

3. The pili of Claim 1, which have a length of at least about 5 to about 10 microns.

4. The pili of Claim 1, which have been separated from *Mycobacterium tuberculosis* cells by mechanical shearing, differential centrifugation or isopycnic separation.

5. The pili of Claim 1, substantially free of cells of *Mycobacterium tuberculosis*.

6. A method of producing the pili of Claim 1, comprising subjecting cells of *Mycobacterium tuberculosis* which produce the pili to mechanical shearing, differential centrifugation or isopycnic separation and then isolating the pili from the cells.

7. An antibody having high affinity and specificity for pili from *Mycobacterium tuberculosis*.

8. A method of inducing an immune response against *Mycobacterium tuberculosis*, comprising administering an effective amount of *Mycobacterium tuberculosis* pili to a subject.

9. The method of Claim 8, wherein the pili are isolated and purified.

10. The method of Claim 9, wherein the subject is a human.

11. A method of detecting a *Mycobacterium tuberculosis* infection in a subject, comprising assaying a body fluid from the subject for the presence of an antibody to *Mycobacterium tuberculosis* pili.

12. The method of Claim 11, wherein the subject is a human.

13. The method of Claim 12, wherein the body fluid is serum.

14. An isolated and purified amino acid sequence which comprises SEQ ID NO: 1.

15. An isolated and purified amino acid sequence which comprises SEQ ID NO: 2 or 5.

16. An isolated and purified amino acid sequence which comprises SEQ ID NO: 3.

17. A peptide fragment of the amino acid sequence of SEQ ID NO: 2 or 5 which is immunogenic.

18. The peptide fragment of Claim 17, which is SEQ ID NO: 1 or 3.

19. An isolated and purified nucleic acid which encodes the amino acid sequence of Claim 14.

20. An isolated and purified nucleic acid which encodes the amino acid sequence of Claim 15.

21. An isolated and purified nucleic acid which encodes the amino acid sequence of Claim 16.

22. An isolated and purified nucleic acid which encodes the peptide fragment of Claim 17.

23. A method of producing the amino acid sequence of Claim 14, comprising transforming a host cell with a nucleic acid which encodes the amino acid sequence, wherein the host cells produces the amino acid sequence, and collecting the amino acid sequence.

24. A method of producing the amino acid sequence of Claim 15, comprising transforming a host cell with a nucleic acid which encodes the amino acid sequence, wherein the host cells produces the amino acid sequence, and collecting the amino acid sequence.

25. A method of producing the amino acid sequence of Claim 16, comprising transforming a host cell with a nucleic acid which encodes the amino acid sequence, wherein the host cells produces the amino acid sequence, and collecting the amino acid sequence.

26. A method of producing the peptide fragment of Claim 17, comprising transforming a host cell with a nucleic acid which encodes the peptide fragment, wherein the host cells produces the amino acid sequence, and collecting the peptide fragment.

27. An antibody which binds with high affinity and specificity to the amino acid sequence of Claim 14.

28. An antibody which binds with high affinity and specificity to the amino acid sequence of Claim 15.

29. An antibody which binds with high affinity and specificity to the amino acid sequence of Claim 16.

30. An antibody which binds with high affinity and specificity to the peptide fragment of Claim 17.

31. A method of inducing an immune response against *Mycobacterium tuberculosis*, comprising administering an effective amount of the amino acid sequence of Claim 14 to a subject.

32. A method of inducing an immune response against *Mycobacterium tuberculosis*, comprising administering an effective amount of the amino acid sequence of Claim 15 to a subject.

33. A method of inducing an immune response against *Mycobacterium tuberculosis*, comprising administering an effective amount of the amino acid sequence of Claim 16 to a subject.

34. A method of inducing an immune response against *Mycobacterium tuberculosis*, comprising administering an effective amount of the peptide fragment of Claim 17 to a subject.

35. A method of detecting a *Mycobacterium tuberculosis* infection in a subject, comprising assaying a body fluid from the subject for the presence of the antibody of Claim 27.

36. A method of detecting a *Mycobacterium tuberculosis* infection in a subject, comprising assaying a body fluid from the subject for the presence of the antibody of Claim 28.

37. A method of detecting a *Mycobacterium tuberculosis* infection in a subject, comprising assaying a body fluid from the subject for the presence of the antibody of Claim 29.

38. A method of detecting a *Mycobacterium tuberculosis* infection in a subject, comprising assaying a body fluid from the subject for the presence of the antibody of Claim 30.

39. A method of inducing an immune response against *Mycobacterium tuberculosis*, comprising administering an effective amount of a nucleic acid encoding a pilin from *Mycobacterium tuberculosis* or an immunogenic fragment of a pilin from *Mycobacterium tuberculosis* to a subject.

40. The method of Claim 39, wherein the nucleic acid is SEQ ID NO: 4.

41. The method of Claim 39, wherein the subject is a human.